31: Hofmann--603 N-3 (1909) 1912 Formosans
116, 366, 543, 657, 177.65 Japanese
636.65

During my stay of one week in the capital and the neighboring regions, I was greatly impressed by the energy with which the Japanese had stimulated the culture of Taihoku. There were extensive government buildings, broad streets, water pipes, schools, barracks, hospitals, reformatories, railroads, telegraph and telephone connections; everything, in short, that is considered representative of western culture. Everywhere there are signs of Japanese patience, energy, and initiative which form a striking contrast to the confusion and negligence of the Chinese regime. There is a museum in Taihoku which is well worth seeing, with an extensive collection of the abundant fauna and flora of this island; it is because of the copious vegetation that Formosa for so many centuries has been the cynosure of all those nations who sought to expand their boundaries. There is also a botanical garden where a large number of useful and interesting plants has been systematically arranged and it is calculated to impress any visitor to the tropics. There is one hotel in Taihoku which, judged even by European standards, is excellent; it offers all the comforts of a tropical hotel.

31: Hofmann--603-604 N-3 (1909) 1912 Formosans
116, 634, 669, 697, 177.63 Japanese
636.63

In the house of the governor, Count Sakuma... I had the opportunity to meet the chief magistrates of the various provinces. Among these there was not one who did not speak either English or German. All of them had been sent to Europe by the government of Formosa to complete their studies there. In every respect, the achievements of the Japanese colonial administration are most impressive, and they become even more so if one takes into consideration the conditions under which the Japanese first took over the administration of the island. In 1895 there was complete anarchy among the Chinese elements of the population. There were organized bands of guerilla soldiers in all the regions that were accessible to foreigners, so that before the administration could proceed to the task of suppressing the Malayans in the mountain regions, [604] it was necessary to break the resistance of the Chinese. I saw some of the leaders of these guerilla bands, who had not been condemmed to capital punishment, in the large reformatory in the capital. There the prisoners were engaged in occupations such as cabinet making, in which they showed a great deal of skill and understanding.

31: Hofmann--604 N-3 (1909) 1912 Formosans
116, 135

In the vicinity of Taihoku, the most interesting features are the harbor of Tamsui and the Onsen sulphur springs near Hokuto. From there we went on an expedition which was to take us to the extreme boundaries of that section of the mountain region which could still be considered fairly safe.

We travelled from Taihoku by train for 1 1/2 hours until we came to the small village of Toyen. Here the land is almost level and has been utilized to the fullest extent. The extensive rice plantations were green and threw into relief the picturesque houses of the Chinese; these are solid brick houses with a curved roof reminiscent of Buddhist temples. In the canals, for which the tributaries of the Tamsui are utilized, there are numerous tame ducks. In the small ponds one may see grey water buffalo, a domestic animal which occurs in large numbers of Formosa. It cannot be compared to European cattle as regards its usefulness in agriculture, and so far attempts to domesticate it have not been successful. Many times I saw the patient Chinese peasants threatened by the buffalo or saw that the animal had broken loose. Next to the rice fields there are extensive tea plantations. This is the region where the famous Oolong tea is produced. There are also banana and pineapple plantations on a smaller scale. The houses are surrounded by slender bamboo trees, and everywhere one may see betel palms, a tree which grows everywhere on Formosa.

31: Hofmann--604-605 N-3 (1909) 1912 Formosans
116, 132, 164

The climate is mild and saturated with humidity; it has a soothing, lulling effect. The greatest number of rainfalls occurs in the north of Formosa (3,440 millimeters per year in Kilung), where they occur regularly throughout the year. In the south of the island there is a dry season during the winter months and a rainy season which begins about the end of May. It is, unfortunately, not possible to stamp out malaria altogether. This disease often occurs here in its most severe [605] form and is fatal after a short time. The agricultural districts, however, are dependent on the humidity which causes the miasma; for any visitor to the island, therefore, quinine is an absolute necessity.

From Toyen we travelled for 14 kilometers on a small vehicle on tracks (52 centimeter gauge); two Chinese coolies served to propel the car. We stopped at the steep bank of the Tamsui; the river rages far below, washing over the reddish-brown, muddy banks veined with large, round rocks. The rest of the way we went on foot or were carried in a sedan; the coolies were strong enough to carry these anywhere, always at the same regular pace. Every foot of land here has been utilized. Here and there we saw Acacia catechu trees; the sweet smell of their small, fragrant blossoms penetrated everywhere. The acacia, a small tree barely 10 meters high, is also important for tanning; this tree predominates in the plains of northern Formosa. Towards evening we came to Taikokan. (1) Our chief objection on this journey was to study the camphor production

1. The spelling of place names is based on the Japanese pronounciation; the Chinese use a somewhat different system of names.

of the Japanese Mitsui Company. The company had obtained a concession in the forested regions bordering on the territory of the aborigines. We did not succeed in this at first, since the region around Taikokan is a Chinese agricultural district.

31: Hofmann--605 [2] N-3 (1909) 1912 Formosans
116, 515

After visiting some Chinese farms, I cannot quite agree with the statement made by almost all observers that the Chinese are extremely dirty.

31: Hofmann--605-606 N-3 (1909) 1912 Formosans
116, 161, 241

The agricultural population [606] contrasts favorably with the migrant workers in the cities. Their agricultural methods are well organized, although it is true that they are based on experience rather than theory. A further testimony to the industry and diligence of the Chinese is the fact that in this field the Japanese cannot compete with them.... There are no Japanese farms on Formosa, although there is still enough land for this purpose. The island is thickly populated; there is an average of 86 inhabitants per square kilometer.

31: Hofmann--606 N-3 (1909) 1912 Formosans
116, 101, 162

In the region of Taikokan I was struck by the fact that the Chinese women did not have crippled feet. From this it is clear that the Chinese living there do not belong to the largest of the tribes, the Hoklos, among whom it is the custom to maim the feet; they belong to the smaller tribe, the Hakkas. It should also be stressed that, while two thirds of the population today is Chinese, there were no Chinese on Formosa until three hundred years ago.

31: Hofmann--606 [2] N-3 (1909) 1912 Formosan Aborigines
116, 177

At the beginning of the seventeenth century Holland ruled the entire island, and the original inhabitants, the Malayans, inhabited all the island-regions even down to the coast. The red barbarians from the west, as the Dutch and all other Europeans were and still are called by the Chinese, established excellent relations with the Malayan tribes, so that many of them were converted to Christianity and western civilization spread rapidly among them. This ought certainly to prove the adaptability of the aborigines to a new culture if they are treated well by the new regime. At the same time it is evident that the administration can win the confidence of the natives only if they intrude no further into their territory.

31; Hofmann--606-607 N-3 (1909) 1912 Formosan Aborigines
116, 131, 554, 721 Atayal

Beyond Taikokan, to the east, the mountains ascend steeply. During the bloody battles in 1907, the foothills were wrested from the Malayans. The tribe which lives here, the Atayal, belongs to the Seiban group (the "red savages"); this is a tribe of headhunters which is feared greatly. The practice of headhunting is or was characteristic of most of the Malayan tribes. [607] The natives decapitate their enemies, among whom they include neighboring tribes as well as Chinese, Japanese, and Europeans. The headhunters are not, however, a courageous people. They lie in ambush and take the enemy by surprise, usually while he is at work; then they cut off his head which they preserve as a trophy at home. If a native has taken the head of an enemy, this is his badge of courage. This cruel custom is so deeply rooted in the beliefs and traditions of the Malayans that all attempts to combat it so far have proved unsuccessful.

31: Hofmann--607 N-3 (1909) 1912 Formosan Aborigines
116, 171, 304 Atayal

Members of the Atayal group are tattooed, both the men and the women, while the tribe in the south of the island do not have this custom. I myself did not come into contact with the aborigines in this region; we were, moreover, safe from attacks since our expedition had sufficient arms. All the regions we saw showed evidence of the recent struggles. The forest had been destroyed and large areas were covered with Miscanthu grass which grew to the height of one meter; this grass offers excellent protection to the headhunters.

The border between the cultivated land and that belonging to the aborigines is protecte by a method protected by a method which had been perfected by the Chinese settlers and which the Japanese have taken over and modernized. The pioneers had set up a wall, like a small wall of China, along the extreme boundary of the conquered territory; guards were stationed at regular intervals to resist all attempts of the aborigines to break through the wall. The Chinese had trained some troops especially for this purpos The Japanese restored these Ayu Lines; they stationed guards at intervals of 300 meter and set up fortresses at longer intervals. Thus the boundary is protected by an organiz military police who must live in this dangerous region with their families throughout the entire year. There is a permanent state of war. The soldiers shoot all Malayans at sight, while the Japanese and Chinese in this region are never safe. I walked along thi line for several kilometers. The Japanese have taken [608] advantage of all the natural fortifications; the wall is set up along the crest of the hills. In the section I visited the line had been moved further up the mountains recently to include the newly conquered territory. The innovation consists in the barbed wire which is strung along the entire line, 170 kilometers long in all; this serves to conduct an electric current with high voltage. To touch the wire would therefore be fatal. The guards make use of the electric current only in times of great danger, especially at night. By thus isolating the aborigines entirely, and preventing the greedy Chinese from smuggling, an occupation

hope eventually to wear down the resistance of the Seiban. It is through the smugglers that the aborigines obtain their powder and ammunition as well as salt; without these they cannot wage the battle for their existence for very long. They are still able to obtain these necessities, however, and it is characteristic of the greed of the Chinese that more of them are killed by the electric wire than by the aborigines themselves; I learned this fact from the district officer in Banshoryo, the main locality of that district. So far, eleven Chinese and only two natives had been killed by the electric wire. For barter between the aborigines and the Chinese, the antlers of deer killed by the latter are an important article of exchange. The Chinese pulverize these and use them for medicinal purposes; they pay a high price for them. The natives avoid the dangerous electrical wire by passing through the raging torrents in the valleys; the Japanese call the river which cuts through the boundary at the point where we passed it Kubitorigawa, that is, the river of headhunting.

31: Hofmann--608-609 N-3 (1909) 1912 Formosans
116, 245, 655

The newly conquered land [EJ: i. e., the Atayal] is now being cultivated with great industry and energy. We saw a settlement of the Mitsui Company where the forested areas had been cleared and were made ready for cultivation. Camphor trees are being planted along the steep inclines and the old camphor trees are felled and prepared for export. Since 1889 camphor has been a government monopoly and constitutes one of the most important sources of revenue on Formosa. "The problem of the aborigines is actually the problem of [609] camphor," according to Davidson, (1) and the truth of this

1. Davidson, J. W. The island of Formosa, Past and Present.

statement cannot be questioned.

It is because of the camphor industry that the Japanese seek to penetrate to the mountain regions inhabited by the aborigines and thus constantly furnish the latter with new motives for revenge. Honda (1) states that in 1896 the aborgines held the belief that

1. Honda, Dr. S. : "Eine Besteigung des Mount Morrison auf der Insel Formosa." Mitteilungen der deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens, Tokio, 1897.

the Japanese were their brothers who had become separated from them by the evil Chinese; this view has also been confirmed by ethnography, since the Malayan origin of the Japanese now seems fairly certain. The activities of the Japanese once they came into possession of the island, however, must have convinced the aborigines that their former brothers had changed a great deal. The belief mentioned by Honda may have originated among the Tsou aborigines on the Arisan River, a tribe which is far more good-natured than the rest.

31: Hofmann--609 [2] N-3 (1909) 1912 Formosan Aborigines
116, 137, 361

From the boundary, [EJ: separating the territory held by the aborigines from that held by the Japanese.] a fairly safe point of observation, I had a view of the mountains and the many deep chasms where the aborigines had their dwellings. There the inclines are covered with dense forests consisting almost altogether of leafy trees... Here and there the silvery leaves of the large camphor trees could be clearly distinguished among the green of the rest of the forest. A few of the houses of the natives could also be seen in the distance...

31; Hofmann--609-610 N-3 (1909) 1912 Formosan Aborigines
116, 554, 721

I tried, by asking the most reliable informants, to find out the reasons why the aborigines were headhunters; I did not limit [610] this inquiry to the natives in the north, the region I visited, but included those in the south as well. I made this attempt especially because, according to many sources, the aborigines are also cannibals; none of these sources, however, has advanced proof of this fact. Thus Fischer (1) tells the

1. Fischer: Streifzüge durch die Insel Formosa. Berlin, 1899.

story of a chieftain who offered his own child as food to a neighboring chieftain. These horror tales are hard to believe about a people which is not, comparatively speaking, on a very low level of development. The natives are not a nomadic group; they are a settled group living by agriculture, although it is true that their agriculture is very primitive. The motive for headhunting is simply that the head of an enemy forms a tangible proof of courage. The natives keep these trophies in the same way that they keep the antlers of stags or the tusks and heads of boar which they have hunted down.

The moral code of the natives demands that they take revenge on the enemy who robbed them of their fertile land and sent them to the barren mountains. This tradition is handed down from generation to generation, and it is believed that it is actually a good deed to obtain the head of one of the enemies of the country. (2) Their revenge

2. For that reason head hunting has increased during the first few years; the Japanese, without harming the natives themselves, have penetrated into their region and exploited it.

is therefore never personal. It is not a question of decapitating the man who has felled a certain camphor tree, for instance. Everyone who belongs to the enemy's party is liable for the common guilt with his head. Since it is also considered an act of courage to get the head of an enemy, this trophy is necessary to one who wants to marry. The bridegroom places the head, a bloody token of his ability to become a husband, at the feet of his bride. A second reason for this custom is a superstition which cannot be eradicated. Thus, in the north, the harvest festival in honor of the gods is celebrated by an offering consisting of several human heads.

On Formosa, headhunting takes the place of a procession held to implore the deity for rain or sun. Finally, headhunting also takes the place of a trial by ordeal. If a

case cannot be decided, [611] the chief of a tribe, the guardian of the law, proclaims th
he who is the first to bring back the head of an enemy, is in the right.

31: Hofmann--611 N-3 (1909) 1912 Formosan Aborigines
116, 171

I cannot here discuss the customs and manner of living of the Seiban, [EJ: i. e. the Atayal] since I did not come into contact with them. I shall discuss the Tsou aborigines later on, but it must be emphasized that the customs of the different tribes vary considerably.

31: Hofmann--611 [2] N-3 (1909) 1912 Formosans
116, 769

In a Chinese village in the vicinity of Taikokan I had an opportunity to observe a peculiar mortuary custom of the Chinese. A young woman in mourning visited a cemetery together with a worker. The ceremonies began with prayers and with the burning of yellow paper, symbolizing money, which the deceased needs in the after-life, and similar ceremonies. The worker then opened the grave. The large wooden coffin was placed on the earth instead of in it; it was covered with earth so that a mound was formed above the grave. When I asked what the purpose of this was I was told that it was customary to exhume the remains of the body several years after the funeral. The young Hakka girl, a working girl dressed in shabby clothes, answered my questions willingly. She told me that she had been saving up money for a long time to have the body of her mother exhumed and buried anew I asked her whether she was sure that this was the right grave and that she might not have dug up another body by mistake; she answered that her mother was pregnant when she died and that signs of this might be seen in the grave. She was right: the gravedigger lifted up the top of the casket with little trouble and began to take out and clean the bones. They were then placed in a large urn to be presented there. When this container has been set up in the house, the ceremonies have been concluded. Ordinarily the bodies are exhumed after three years; by that time, since the body is hastily buried and little is done to preserve it, it is already a skeleton. If it should happen that some flesh and tissues still remain, the Chinese take this as a sign that the deceased was a bad man and cannot find peace in the after-life.

31: Hofmann--612 N-3 (1909) 1912 Formosans
116, 132, 361

My stay in the region of the Tsou aborigines was longer and more rewarding than my visit to Taikokan. We started from the small village of Kagi approximately in the center of the island. We arrived there after a journey during hot weather, having traveled by train, on May 12th, 1909. We immediately become aware of the change in climate. While in the north there had been a great deal of rain and humidity, here there was drought; the humid northern winds which predominate in the spring do not penetrate to the center of Formosa. In Kilung and Tahoku the abundant rainfalls are evenly distributed throughout the entire year while in this region the rainy season begins at the end of May and lasts until October. The effect of these climatic differences may be seen in the vegetation; here there are far more xerophytic plants. In the north at this time of the year the rice fields are already green, while here the soil has not yet been plowed since the plants could not grow. There was not a cloud in the sky and we were exposed to the full heat of the sun. Kagi, a village which otherwise does not offer anything of interest, was shrouded in a cloud of yellow dust. In 1907 a violent earthquake occurred here; of the buildings of former times little has remained except the gates of the city. On Formosa all the cities in the Chinese region are enclosed by walls and ramparts (cf. Fig, 1); a European who visits these cities is reminded of the medieval cities of Europe.

31: Hofmann--612-613 N-3 (1909) 1912 Formosans
116, 137, 311, 499, 563, 177.31 Japanese
636.31

The pigtail which to us symbolizes Chinese traditions, in the cities exerts its rule in the literal as well as the figurative sense, it is a rule which cannot be stamped out. Chinese and Japanese are separated from each other by a difference in culture and beliefs which cannot be reconciled with each other. On the whole the Chinese element predominates and numerically they are so far superior that an amalgamation between the rulers and the subjects in the near future seems out of the question. The Japanese farmers, merchants, and small business men cannot compete with the Chinese; the Chinese are an astute people and they are moreover, better adapted to the [613] climatic conditions on this island. This is another motive for the Japanese to exploit the interior and to penetrate still further into the regions of the aborigines; here they plan to set up business enterprises on a large scale, but for this again they must use cheap Chinese labor. One of these enterprises is the construction of a railroad in the mountains so that the large forested regions in the vicinity of the Niitakayama (cf. Fig. 2, Mount Morrison) may be exploited. The forests are called the Arisan Forest; they have played an important role in Japanese politics during the last few years. The Fujita Company had acquired a concession for timber here; the government had to buy this land again from the company, which had already begun to build a railway, so that the price which had to be payed in all amounted to about two million yen, a sum which had to be granted by the Japanese Diet.

31: Hofmann--613-614 N-3 (1909) 1912 Formosans
116, 137, 245, 283

From Kagi we went to Chikutoki; on that stretch the land is level and the railway has already been completed. This region was also still dry, and the natives had not yet tended the fields. A feature characteristic of tropical vegetation is the abundance of palm groves (betel palms); the trees have an average height of seven to eight meters. The Chinese and Malayans chew betel nuts as a stimulant. The vegetation in the river-beds, most of which are dry at this time of the year, is more copious. The plant most frequently found, which is also cultivated artificially, is the large Nephelium longana (called Ryugan by the Chinese and Japanese) the fruits of which are very tasty. There are also large, old Ficus trees, including several varieties of palm trees (Phoenix humilis), Passiflora (Carica Papaya), Anona squamosa, etc; all these are representative of tropical flora. On the barren slopes there are Pandanus tectorius with leaves like pineapple trees; this furnishes a fiber which is used for hats resembling panama hats. The flora on the whole is rich in textile, especially fibrous plants. There are, first of all, the rattan palms with prickly leaves. The tough fiber of this palm is an excellent substitute for hemp and is used for all sorts of household utensils everywhere on Formosa. I did not see artificial plantations of this palm anywhere, however, [614] the Chamaerops excelsa is planted everywhere by the Chinese as a textile plant. The Liquidambar formosana is also planted artificially in this region; the leaves are used as feed for silkworms and the Japanese government expects to develop a successful industry of this plant.

From Chikutoki we started to ascend the mountain; where the ground was fairly level we used sedan chairs made of two bamboo poles in which we sat in a half squatting, half lying position. Four strong Chinese were able to carry my weight, 78 kilograms, with no difficulty. They were able to climb ascents of 20 to 30 at the same steady pace. The carriers in back change about every fifteen minutes.

After an ascent of about five hours, at a height of about 600 to 700 meters, we found that the landscape had changed considerably. We went through bamboo forests, more dense and more extensive perhaps than anywhere else on the Japanese islands; forests like these are not found, so far as is known, anywhere else on Formosa. In an area of about 10,000 hectares the vegetation consists entirely of bamboo trees; these grow so close together that there is no space for other plants to develop. The average height of the bamboo trees is not more than 13 meters. Whether these bamboo forests represent the original vegetation or whether they have taken the place of leafy trees which were destroyed by a forest fire cannot be determined. The fact that they are spread over a large area supports the assumption that the vegetation is original and has a xerophilous character. The forests of bamboo trees grow on dry, low elevations composed of sandstone which are exposed to the sun; at the level at which they grow there are dry and rainy seasons. At a height of about 1,000 meters there are rainfalls of short duration with an intensity characteristic of the tropics almost every day; at this level bamboo trees no longer predominate. Chinese settlers have penetrated as far as the bamboo

forests, however, and from this it might be concluded that the original jungles were destroyed by the fires of the colonists [615] and that new shoots of bamboo took their place by a natural process. This has happened several times on the Japanese islands. On the other hand the settlements are sparse and do not penetrate very deeply into the region of the bamboo forests. The numerous places where trees have been burned down, which are also found in the sections entirely inhabited by the aborigines, are overgrown with stiff, tall reed plants, Imperata and Miscanthus which because of their dense growth prevent the growth of trees at least for the near future. It is well known that bamboo trees grow to their full height within one year. Since it has many uses, bamboo often takes the place of timber; for that reason the Chinese exploit the forests around their settlements since for their purposes bamboo alone is sufficient.

31: Hofmann--615 N-3 (1909) 1912 Formosans
116, 289, 313

In the Arisan Forest, the Chinese are exploiting some areas for the paper industry. They cut off the bamboo stems after one year and place them in grooves where they are exposed to caustic lime; after this mass has decomposed, it is crushed in a mill run by animal power and is ground by a second mill with the aid of water. Finally it placed in troughs where the workers stamp it with their feet until it has become a thin, fibrous, yellow paste. The wooden fiber is then taken out and made into thick yellow cardboard; next it is placed into kilns and dried. 1,200 of these cardboards of O. 75 square meters each is worth about 1. 70 K at the place where it is produced (70 sen in Japanese money).

31: Hofmann--615 [2] N-3 (1909) 1912 Formosans
116, 132

We spent the night in a small hut near the railway which was being built in Karapen, at an altitude of 1,080 meters, beyond the first mountain ridge. We arrived here in the afternoon; shortly afterwards it began to rain. The valley and the hill which we had passed during the day had been completely dry. From here on, however, as long as we remained above an altitude of 1,000 meters, there were copious rainfalls every day during the hot part of the day; the rain never lasted very long, and the morning and evening were always clear.

On the following day we advanced [EJ: from Karapen] about 18 kilometers and reached an altitude of approximately 1,400 meters. When we had reached our destination, a point which the Japanese had called Funkiko and which was to form the end station of the [616] future railway, the thermometer stood at 19° Celsius and the aneroid at 1,420 (corrected at sea level). Our way took us through depressions and over elevations. The mountains, which consist of schist, are broken up into numerous steep and narrow ranges. Here and there sandstone lies exposed; in most places, however, the ground is completely covered with vegetation. In the northeast the Tauzan (Devil's Mountain) drops down abruptly. This is an isolated limestone mountain with barren slopes; it has a height of 2,800 meters. Here the vegetation is entirely different from that we encountered on the previous day. Before we entered the subtropical forest of Lauraceae trees we were struck by the beautiful tree ferns (Fig. 3), which attain a height of 10 meters or more, and the large banana trees growing on the mountains (Musaceae) with their huge leaves. Both of these plants, in contrast to the dry bamboo forests, demand a high degree of moisture both in the soil and in the atmosphere while they cannot grow where there are strong air currents. On these elevations there is not even a breeze, which is all the more striking since the valley of Kagi, barely 20 kilometers distant in a direct line, is frequently ravaged by violent typhoons. Everywhere we saw banana leaves which were unharmed; these leaves would be easily torn if there were a strong wind. It is a remarkable fact that typhoons are limited to the lowest regions while above

an altitude of 100 meters they do not occur. Although tree ferns and Musaceae, which usually occur in groups, do not take up much space in a limited region and often grow between other trees in the forest, forests of fern and palm trees must be considered characteristic of Formosa. They form perhaps an example of Tertiary flora; according to a theory now accepted by geologists Tertiary flora; which demands a constantly humid, rainy and foggy climate which is at the same time warm and not windy, once predominated on the earth.

On the second day of our journey we again passed through beautiful Lauraceae forests; the most attractive scenes, however, were reserved for the third day, when we covered the distance from Funkiko to Goten (2,220 meters). On that day we crossed two mountain ridges so that we could reach the plateau of the Arisan mountain [617] by the shortest possible route. The region between 1,000 and 1,800 M. is covered with foliaceous forests; here as everywhere else camphor trees grow only singly, while evergreen oaks, Quercus gilva, acuta, etc., predominate, as well as Pasania cuspidata, Cinnamonum pedunculatum, Machilus Thunbergii. All the foliacious trees here are evergreen. There are huge tree trunks overgrown with epiphytic plants; the tops of the trees form an almost impenetrable roof so that neither rain nor sun is admitted here. The average height is over 30 meters. In this hothouse atmosphere there are numerous lianas which grow to great heights and develop strong aërial roots the size of an arm; they are suspended from the tops of the trees on which they live.... The lower

arboreal flora has its habitat among the tree tops. There are large white orchids and ferns, and on the long branches of the crown and the sides of the Lauraceae trees there are groups of hart's tongues. All of these plants...are engaged in a continual struggle for light. Our coolies were very careful not to step into the shrubs along the paths, where a dangerous venomous snake with green coloring has its habitat.... The densest part of this forest is found in the depressions and on the lower slopes. In the higher regions the forest is less dense and there is more light for the plants to develop so that even those on the ground are not hindered in their growth. There are various types of shrubs, among which the Fatsia, with its large digital leaves is especially striking. Gradually the Lauraceae grow further and further apart and less tall. At an altitude of about 2,000 meters conifers begin to appear, first singly and gradually growing taller and more numerous. These consist of species of Chamaecyparis; the evergreen foliaceous trees take the place of underbrush while these predominate. [618] After the gigantic proportions of the jungle through which we had just passed we did not immediately become aware of the size of these trees, which have stood for so many centuries. It was not until we took measurements that we realized that these must be among the tallest trees anywhere in the old world. There are some which grow as tall as 60 meters. The largest of the Chamaecyparis formosensis have a diameter of six meters;

they are about 52 meters high and furnish 280 cubic meters of timber. (cf. Fig. 4). A single tree thus offers more timber than a hectare of old pines in central Europe.

The largest trees may be found in the vicinity of Goten, which is to be the end station of the railway, where the Japanese have already built several houses. Here there is a wide, almost level depression with a deep layer of humus which is protected from the wind on all sides; this is an ideal habitat for the conifers, and the trees here are probably as large as those in California. Since 1907 a meteorological station has been set up in Goten...

We spent several days exploring the jungle area around the Arisan, an area comprising 10,000 hectares in all. At a level of 2,400 meters and above the Cupressi predominate. Here the trees do not attain the heights quoted above, but the average height is over 40 meters and the forest is so dense that one cannot see more than a few feet away. One elevation, which has been named Manzaisan, has an altitude of 2,670 meters and is overgrown with reeds; from here one has a good view of the surrounding mountains. There is a thick fog below so that we cannot see the route we had taken the previous day; in front of us, however, lies the imposing peak of Mount Morrison, which, according to the aneroid, has a height of 4,340 meters. The highest point visited by us in this region was the peak of the limestone mountain, Teufelsberg, with an altitude of 2,800 meters. Here the view is obscured by the dense forests.

31: Hofmann--618-619 N-3 (1909) 1912 Formosan Aborigines
116, 101, 177, 291, 721 Tsou

During our expedition through the forests we occasionally saw some of the natives who had come here to hunt or merely from curiosity. [619] They are a shy people, short, with beautiful bright eyes; they are clothed in deerskins, leaving their arms and legs bare. These are members of the Tsou tribe. The word tsou is equivalent to human being, but they do not apply this term to any other people, neither the Malayans nor the Chinese and Japanese. They are, comparatively speaking, quite civilized; I was told that they had given up headhunting several centuries ago, but this is probably due to the influence of a foreign culture more than moral conviction. There has been no perceptible progress in their culture. Since they are numerically inferior to the other tribes and since they are constantly at war with the neighboring tribe, the Hosha, they are probably forced to accept the rule of the Japanese.

They may be hired as carriers; they carried our baggage quickly and efficiently through the chasms and over the mountains when we continue our expedition on the following day. I visited two villages inhabited by this tribe; I went inside some of their huts and stayed overnight in one of the villages, so that I have some first-hand information about this tribe.

31; Hofmann--619 [2] N-3 (1909) 1912 Formosan Aborigines
116, 342, 361, 513, 622 Tsou

When I entered the first village, Teboro, I was received by the chief and treated with great respect; the village is enclosed by a low stone wall, as is each of the houses in the village. The huts are oval in shape; they are made of rough stones taken from rivers and brooks. They are barely 1 1/2 meters high; the ratio between the length and width is 4 to 1. The post which supports the roof consists of a tree trunk which has not been shaped in any way; the roof itself consists of reeds. There is one, or at most two openings without a door; these are on the narrow sides of the house and serve both to give light and to admit air. The hut of the chieftain is somewhat larger. There are niches in the walls which serve as sleeping quarters; the natives sleep on clay which has been beaten flat, while the chieftain sleeps on a bamboo support which is in the center of the hut. The clay floor of the house I visited had been cleaned, but I do not know whether this is always the case.

31: Hofmann...

116, 281, 396, 721, ...

There were several large stone ... the tombs of deceased ... trophies obtained through ... tribe. In the house I ... than a hundred ... natives hang in their ... them dry out.

They have domestic dogs of a small black breed which guard the houses and are used in hunting.

Another domestic animal which is found everywhere is a small black pig. There are also chickens in the village, but there are no cattle. The entire tribe comprises 1,500 members, including 400 men able to bear arms; all the men know how to shoot.

31: Hofmann--620 [2] N-3 (1909) 1912 Formosan Aborigines
116, 224, 241

The aborigines of Formosa are not a nomadic people, nor do they live by hunting alone, although they are passionate hunters. They are an agricultural settled people and they move to another locality only when they are driven out of their homes. Their agricultural methods are quite primitive. Millet is cultivated chiefly; there is also a kind of rice plant which does not require irrigation, as well as the Colocasia antiquorum, a tuberous fruit of the Aroidea family which is very popular among the Japanese....

31: Hofmann--620 [3] N-3 (1909) 1912 Formosan Aborigines
116, 241, 462 Tsou

Most of the natives have small fields on the slopes. I did not see any traces of agriculture near the houses; in the depressions, because of the debris washed down by the rivers, there are few places fit for cultivation. Most of the labor in the fields is done by the women. Within the tribe or tribal village, both labor and profit are regulated according to the communistic principle. Hunting and agriculture are both communal undertakings and the profit is divided equally among all; the children get the same share as the adults.

31: Hofmann--620-621 N-3 (1909) 1912 Formosan Aborigines
116, 342, 561, 621 Tsou

The most striking feature in the villages of the aborigines are the houses for bachelors (cf. Fig. 5). Both of the villages I visited, Tebor and Tappan, have a large hut of this type; it may be easily distinguished from the rest since it is erected on pilework, while the other houses are built of stone. The lower story is open on all sides; the upper story is open along the front of the house and has a straw roof. The natives climb up to the hall on a tree trunk in which notches have been cut; this is by no means easy. [621] In this hall all the unmarried men live together. Here the natives also hold their councils of war and discuss all the important affairs of the tribe, so that this hut is, as it were, their ministry, parliament, and stock market. No woman may enter this sanctum under any conditions.

It is strange that, although the Tsou tribe supposedly has given up headhunting long ago, the natives preserve large numbers of human heads in nets; in Tappan I saw about 140 of these. Judging from their age and condition I would say that this tribe practiced headhunting until quite recently; I believe they have ceased to engage in this sport only from motives of self-preservation and from fear of the Chinese and Japanese. The respect with which they treat these trophies of war indicates that, if a war breaks out again, this old custom will be revived. The Tsou are the enemies of the neighboring tribe, the Hosha (cf. Fig. 6) these are a more savage people and I was not able for that reason to observe their villages as much as those of the Tsou. The presence of the Chinese and Japanese, and the guards posted along the boundaries of the latter, prevents warfare between these two tribes. I learned that the reason for the feud is that both claim the same hunting grounds.

31: Hofmann--621-622 N-3 (1909) 1912 Formosan Aborigines
116, 273, 292, 517 Tsou

When I visited the bachelors' quarters a festival was in progress. The chieftain was wearing a red jacket made of cloth; the other participants had taken off their deerskin garment and were squatting on the floor of the hall wearing nothing but a simple loincloth made of fiber. There were 60 men in all. All were drinking remi, a fermented beverage, in great quantities. They prepare this from rice and millet which has been chewed by the women; they spit this into a trough and the paste is left there to ferment. When this process is complete the paste is mixed with water and the drink is ready. The men used cups made of pieces of bamboo; one of them was drinking from a [622] beer bottle. They emptied the bamboo cups in a single draught. Some of the men went around to fill the cups and urged those who were slow to drink more. The men embraced each other and tried to empty their cups to the last drop.... They ate sugar with the Remi; the younger boys were given sugar without the beverage, although, when I tested the drink, I found that it had a very low alcoholic content. The men must have consumed large quantities, however, for late at night, when we retired, we heard them shouting and stamping their feet.

31: Hofmann--622 N-3 (1909) 1912 Formosan Aborigines
116, 301, 304 . Tsou

The Tsou, like all the other tribes of southern Formosa, are not tattooed but they are fond of ornaments. They wear necklaces made of glass beads and shells (Fig. 7), as well as ear pendants made of rhomboid-shaped, polished wood which ends in a point. Some of them were wearing bracelets similar to the necklaces. Whether these represent medals or whether they merely satisfy the aesthetic impulse of the natives I cannot say.

31: Hofmann--622 [2] N-3 (1909) 1912 Formosan Aborigines
116, 181, 609 Tsou

On the whole the aborigines are good-natured, sociable, and gay. When they are together indoors they talk a great deal and they love to sing and to make noise. When they are outside, however, they are shy and their behavior toward strangers, even toward Malayans of another tribe, is modest and reserved.

31: Hofmann--622 [3] N-3 (1909) 1912 Formosan Aborigines
116, 276, 323 Tsou

All the natives smoke; the native term for tobacco is tamako. They have small pipes made of clay. They do not have the custom of chewing betel nuts, however....

31: Hofmann--622-623
116, 291, 304, 881

The men remove their eye teeth. I was not able to learn the reason for this but since it is done when the boys are 12 years old, it is likely that this is connected with puberty rites. They also tear out their beards, so that all have only a short stubble on the face. The natives as well as the Chinese and Japanese here wear a short slight beard. The custom of tying up the prepuce of boys is [illegible] practiced. [illegible] This is not done in every case it is probably done only for prostitutes on the public thoroughfare the woods which are overgrown with [illegible] and thorny shrubs. They have about a light bellyband made of fiber. This is probably also done to protect the penis, as although to help them bear their hunger more easily if there is no food, I was also told the purpose of helping them to keep their bodies slender and [illegible].

31: Hofmann--623 N-3 (1909) 1912 Formosan Aborigines
116, 224, 261, 411 Tsou

Although the natives consume great quantities of food and drink at banquets, they are able to go without food for days. When they are hunting, they often lie in wait for a whole day and night; they shoot the game only when they are very close. They are therefore not very good marksmen; they get their guns, which are not of a very good quality, from the Chinese. Since powder is difficult to get they are forced to use it sparingly. They do not hunt for beasts of prey such as bears (Ursus malayanus), leopards, wild cats, etc., and they seldom shoot birds.

31: Hofmann--623 [2] N-3 (1909) 1912 Formosan Aborigines
116, 721

On the whole the Malayans on this island do not possess a high degree of courage. The practice of headhunting is to be regarded not as a display of primitive aggressiveness but as the result of a constant desire for revenge. I believe that it corresponds to the blood vengeance found among other primitive peoples.

31: Hofmann--623 [3] N-3 (1909) 1912 Formosan Aborigines
116, 291, 609, 301, 592, 837 Tsou

Members of the Tsou tribe are monogamous; adultery on the part of the woman does not occur at all. The women are very shy; they do not look strangers in the face, and they go about with their eyes downcast. Some of them wear garments made of cloth from China, others weave their own garments on primitive looms. I saw few women who were wearing ornaments; the men here are far more vain than the women.

31: Hofmann--623 [4] N-3 (1909) 1912 Formosan Aborigines
116, 514, 834, 844 Tsou

After the delivery, the mother cuts the sharp umbilical cord with a sharp piece of reed; the newly-born infant is washed in a brook. Both men and women are modest to a very high degree. The men who were our carriers for several days had a high sense of decency, and, if they had to relieve themselves, always hid from the rest.

In their marital relations they show a great respect for the women. The bachelors are not admitted to the houses and are therefore forced to practice continence. For that reason they inflict severe punishment on any member of the tribe who has violated a woman within the tribe, and in the case of a stranger, this offense is a casus belli.

In 1908 a Japanese forester violated the wife of a native in Rantaisan, in the region of the Hosha, an aggressive tribe; this led to a long headhunting expedition. The aborigines, even the women, were curious about the conquerors and therefore often went near their dwellings. The Japanese foreman was especially attracted by one woman and abducted her. She remained with him, probably because she was afraid of the severe punishment which the chieftain would administer. Her husband did not take the offense as seriously as her father-in-law, who forced his son to take revenge. Four Japanese workers who had had nothing to do with the affair were attacked by a group of natives and decapitated. The man who had abducted the woman was not one of the victims.

31: Hofmann--624-625 N-3 (1909) 1912 Formosan Aborigines
116, 173 Tsou

The Tsou tell the following story about the origin of headhunting, at least as regards their enmity with the Chinese:

About 150 years ago, when the Tsou tribe still practiced headhunting, a Chinese, Gofo, had made friends with the chieftain and therefore was greatly respected by the entire tribe. There was a drought which lasted for a long time so that the chieftain became worried. He thought that the god might be angry since, because of the persuasions of the Chinese, had not been given any offerings consisting of human heads for a long time. He consulted with Gofo, who tried in vain to convince the chief that to offer human sacrifice was a futile undertaking. Finally he proposed to the chief that, if a human head was demanded by the god, it should be his own. The chieftain accepted this offer and killed Gofo. After this there was rain, but in a short time the Tsou tribe was decimated by an epidemic of smallpox. Gofo appeared to the chieftain in a dream and thus the epidemic was considered another punishment of the gods; from then on the natives became headhunters. [625]

In the Chinese settlements there are several temples consecrated to Gofo and his picture has been preserved there. His rash offer has made him a demi-god among the Chinese.

31: Hofmann--625 N-3 (1909) 1912 Formosan Aborigines
116, 622, 692 Tsou

As far as we know, the office of chieftain today is passed on through inheritance; the chieftain is also the only judge in the tribe. Each tribal village also has its local chief, chosen by the people themselves; these subordinate chiefs, however, exercise very little power.

31: Hofmann--625 [2] N-3 (1909) 1912 Formosan Aborigines
116, 262, 343, 784 Tsou

The food of the natives consists chiefly of millet, rice, and Colocasiae. This is supplemented by game, deer and boars, as well as pork and chicken. The natives also eat fish, which they obtain in abundance in the many streams on the mountains. The Tsou natives are not allowed to eat fish in their homes; the reason for this taboo is not known. If they want to eat trout, they must eat in a house built for this purpose. There is an open shed with a straw roof erected on pilework in Tappan which is used on those occasions.

31: Hofmann--625 [3] N-3 (1909) 1912 Formosan Aborigines
116, 181, 774, 802 Tsou

The aborigines believe in a life after death. They believe that everyone has two souls; one of these remains in the house after death, while the other lives in the jungles on Arisan. The natives therefore enter this region with all signs of awe and reverence. They seem to be an intelligent people on the whole; one indication of this is that they have terms for high numbers such as hundred, thousand, and million. There would be no difficulties in giving them instruction except that they value their freedom and their own customs above everything else and thus fear and avoid the fetters of civilization.

31: Hofmann--625-626 N-3 (1909) 1912 Formosan Aborigines
116, 181, 555, 609 Tsou

On our way back from the Arisan Mountain to Kagi a native, an older man, carried our baggage all the way. This is not the custom ordinarily; most of the natives offer their services only within their own region and return home as soon as they see the first houses of a Chinese settlement. In this case, however, the man wanted to call for his son, a good-for-nothing who had left the leisure of his native village in order to obtain work in Kagi. In another case, a young man had made friends with the Japanese and joined the police force. His work was very satisfactory; [626] he learned to read and write Japanese. After two years, however, he let himself be persuaded by the other members of his tribe to leave the police force and was chosen as a local chief. Thus, although relations between the Japanese and the Tsou natives are fairly good, there is a tendency among the latter to live apart and to retain their freedom. It is only natural that the Japanese scheme for exploiting the island, including the forests sacred to the natives as well as game, is not favored by the natives. While on the surface the Tsou natives now seem by no means hostile to the Japanese, it is not certain that these peaceful conditions will prevail in the future; it is possible that the Tsou natives may ally themselves with the other Malayan tribes against the foreign conquerors. It must be emphasized, however, that these are not bloodthirsty savages; rather they have the mentality of children and are easily swayed by an impulse of the moment. Their gay, happy mood may change in a moment to fear and distrust; then they cry like children. These sudden changes in temperament are frightening to a stranger.

31: Hofmann--626 N-3 (1909) 1912 Formosan Aborigines
116, 411 Tsou

All the natives carry a sharp knife (this is imported from China, since the natives themselves are still in the paleolithic age and have no wrought metals) at all times. Whenever they stop on a longer march, they take out the knife and whet it on a sandstone.

31: Hofmann--626 [2] N-3 (1909) 1912 Formosan Aborigines
116, 291, 481 Tsou

In warfare the natives have the advantage in the mountains since they are very agile, skillful climbers. I was often able to observe this myself; they climbed even very steep slopes at a running pace, and although they were loaded down with baggage, they were secure on overhanging rocks. In the plains, however, they tire very easily, and they cannot make a long march on level ground. When they go on longer walks, the natives protect their heads from the sun with a covering of leaves or flowers; dressed thus they certainly do not inspire fear.

31: Hofmann--626-627 N-3 (1909) 1912 Formosan Aborigines
116, 436, 461, 804 Tsou

The natives do not know the value of money. They have several articles used for barter and pay, chiefly cloth. They measure length by spans. [627] Since they have a communist economy they pay by the day, so that the strongest man is hired as a carrier at the same price as the weakest boy. If a distinction were made, they would consider this unjust. In the same way they divide food among themselves so that everyone gets an equal share.

31: Hofmann--627 N-3 (1909) 1912 Formosan Aborigines
116, 161 Tsou

In spite of their favorable living conditions, the population of the Tsou natives has hardly increased at all. There are no large families among the Malayans on this island....

31: Hofmann--627 [2] N-3 (1909) 1912 Formosans
116, 701

When we had returned to the valley... we watched a parade of the guards. These men are stationed along the boundary; they are Chinese who have been drilled by Japanese officers and evidently have had an excellent training.

31: Hofmann--627 [3] N-3 (1909) 1912 Formosans
116, 311

After a short stay in Kagi we proceeded to the south by train. A few kilometers to the south we saw the pillar which marks the point where the railway cuts across the Tropic of Cancer. Our journey proceeded without interruptions to the end station in the south, Takao, the harbor city. On the whole the vegetation here is not so copious as in the north; this is due, of course, to differences in the climate and the frequency of rainfalls. Here, too, most of the soil which is fit for cultivation has been used for rice plantations; instead of tea plantations, however, there are fields of sugar cane here and there.

31: Hofmann--627-628 N-3 (1909) 1912 Formosans
116, 132, 311, 249

The sugar industry on Formosa has increased considerably; this industry will become [628] still more profitable when the projected plan for a system of irrigation with artificial dams has become a reality. In this way the tributary of the southern Tamsui may be utilized and more soil than hitherto will be irrigated. Southern Formosa is affected by the drought every winter.

31: Hofmann--628-629 N-3 (1909) 1912 Formosans-1-2
116, 132, 137, 504

The bay and lagoon of Takao offer a beautiful sight. The lagoon is connected with the ocean by a narrow opening, hemmed in by coral reefs; large boats therefore cannot enter the bay. Work on harbor installations is still in progress; this is an ambitious and costly project, but it is a necessary step in establishing communication with the south. It will also be necessary to make the harbor safe, especially since the roadstead of Takao offers no protection even to large [redacted]mers during the frequent and violent typhoons. The most dangerous months for typhoons are June, July, and August. The direction of the wind, which may develop a velocity of 100 miles per hour, is from east to west. For those harbor installations which are made of wood, the Teredo navalis is extremely destructive. Pine wood may be destroyed by these worms within three months, while Chamaecyparis wood may last for one year. Timber which is used for buildings on land (for railways, telegraph poles, etc.) is destroyed by white termites, but if the wood is impregnated with tar, this forms a sufficint, though costly, protection. The bay within the lagoon is about 22 kilometers long and 5 kilometers wide at its widest point. Around the bay there are artificial sea gardens. Among the plants growing wild there are first of all pandanus groves, which probably form one of the most unusual features in the vegetation of Formosa; while in other regions of the island pandanus grows only in the form of shrubs here it is tree-like and forms a plant typical of coastal regions.

Another unusual form of vegetation of a purely xerophilous character is a species of

tropical Euphorbia Tirucalli (spurge); here it has hardly any leaves, since their place is taken by green branches. Its habitat is among the rocks on the beach, and it may grow as high as ten meters. [629] Finally, there are several species of mangrove along the level coast of the lagoon of Takao.

31: Hofmann--629 N-3 (1909) 1912 Formosans
116, 249, 311

From the coast I went to Ako and visited the extensive sugar plantations there. These are run with modern equipment on a large scale; there are large factories and there is a great deal of activity. Aside from these plantations, however, the land around here has not been exploited to the fullest possible extent.

3h: Hofmann--629 [2] N-3 (1909) 1912 Formosans
116, 361

On my return I stayed for some time in Tainan, the southern capital. This is still one of the most important cities on the island because of its nearness to the shallow Amping Harbor, although it is likely that Takao, with the increase in trade, will assume a greater importance.

31: Hofmann--630-631 N-3 (1909) 1912 Formosans
116, 342, 423, 556

In Tainan I stayed in an old house which belonged to a member of the Chinese nobility; there I was able to observe the luxury with which the Chinese surround themselves. Many of the Chinese have accumulated considerable wealth on Formosa; there are several millionaires among them who had remained after the conquest of the island, while others fled to the mainland with all their possessions. In contrast to the Japanese, who throughout their history have looked down upon capitalists and traders, who even despise merchants and today still do not always accept them socially, the Chinese are all motivated by a desire for profit. The pioneers among them took large areas of the most fertile land from the natives; these were leased and subleased to later immigrants. Thus when the Japanese took possession of Formosa they encountered a complicated system of land ownership and tenure which yielded great profits to some individuals. In the management of real estate problems, [631] which resulted in the large-scale exploitation of tenants and subtenants, the new regime has constantly taken the side of the exploited and it has succeeded in bringing order into the system as a whole. There is still a wide field of activity for the Chinese capitalists, however, since they apply only to their compatriots for credit, never to the Japanese.

31: Hofmann--631 N-3 (1909) 1912 Formosans
116, 563, 609

Japanese industrial products do not sell well among the Chinese. Most of the Japanese on Formosa are high or low officials. While in view of the large population it might be expected that the Japanese would develop an active and extensive retail trade, the relations between the Chinese and Japanese so far have made this impossible; this may be due to the fact that the Chinese isolate themselves intentionally as well as to an inherent antagonism between the two groups and a lack of confidence on both sides.

31: Hofmann--631 [2] N-3 (1909) 1912 Formosans
116, 342, 351, 871

These Chinese capitalists know how to live luxuriously; their houses are beautiful even by European standards. A drive leads from the street to a large garden enclosed by the house and annexes. There are high, cool porticos leading to the residence proper. Many of the houses have a small theater. Since in former times there were no public schools in China, or at least none that were attended by the children of the rich, the Chinese here have set aside one wing of the building for the children and their tutors. As the Chinese ideal is to have a large family and this ideal is often realized, this wing is usually very large. In the center of the courtyard, there is a pond. There are small arbors and arcades arranged in excellent taste. From the terrace one has a beautiful view of the estate, which is hidden from the observer on the street. The house where I stayed had been made into a Japanese hotel but the features characteristic of the original estate had been retained.